

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 - 18 (canceled).

19. (currently amended): A mobile communication system, comprising:
a mobile terminal unit ~~in which a calling process and a Node b utilized for cell setting are controlled by the same protocol architecture; ;~~

a radio base station which communicates with said mobile terminal unit via a radio channel; [[and]]

a radio controller which controls said radio base station [[,]] and is physically separated into ~~first control means~~ control plane equipment for controlling transfer of signaling and ~~second control means~~ user plane equipment for ~~accommodating said radio base station under the control and controlling transfer of user data; and~~

a radio base station replacement control apparatus which controls replacement of said radio base station,

wherein the mobile terminal is handed over from the radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller.

20. (currently amended): A mobile communication system, comprising:

~~a mobile terminal unit in which a calling process and a Node b utilized for cell setting are controlled by the same protocol architecture;~~

a radio base station which communicates with said mobile terminal unit via a radio channel; [[and]]

a radio controller which controls said radio base station [[,]] and is physically separated into ~~first control means~~ control plane equipment for performing control independent of a radio transmission scheme and ~~second control means~~ user plane equipment for ~~accommodating said radio base station under the control and~~ performing control depending on a radio transmission scheme; and

a radio base station replacement control apparatus which controls replacement of said radio base station,

wherein the control plane equipment and the user plane equipment are adapted to be connected across a network.

21. (currently amended): A mobile communication systems comprising:

~~a mobile terminal unit in which a calling process and a Node b utilized for cell setting are controlled by the same protocol architecture;~~

a radio base station which communicates with said mobile terminal unit via a radio channel; [[and]]

a radio controller which controls said radio base station [[;]] and is physically separated into ~~first control means~~ control plane equipment for controlling transfer of signaling and ~~second control means~~ user plane equipment for ~~accommodating said radio base station under the control~~

and controlling transfer of user data, said ~~second control means~~ user plane equipment performing control depending on a radio transmission scheme; and

a radio base station replacement control apparatus provided physically independently of the control plane equipment and the user plane equipment, the radio base station replacement control apparatus controlling ~~which controls~~ replacement of said radio base station with other radio base stations being controlled by the radio controller or by other radio controllers.

22. (currently amended): A mobile communication system, comprising:

a mobile terminal unit ~~in which a calling process and a Node b utilized for cell setting are controlled by the same protocol architecture;~~

a radio base station which communicates with said mobile terminal unit via a radio channel; and

a radio controller which controls said radio base station ~~[[,]]~~ and is physically separated into ~~first control means~~ control plane equipment for controlling a terminal resource of said mobile terminal unit and ~~second control means~~ user plane equipment for accommodating said radio base station ~~under the control~~ and controlling a base station resource of said radio base station ~~[[; and]]~~ ,

wherein the user plane equipment is incorporated into the radio base station,

~~a radio base station replacement control apparatus which controls~~ wherein replacement of said radio base station in communication with the mobile terminal with another radio base station is controlled by a user data selector and synthesizer unit incorporated into the radio base station.

23. (currently amended): A mobile communication system according to claim 19, further comprising:

a network,

wherein ~~which connects said control plane equipment, second control means, and radio base station replacement control apparatus~~ control plane equipment and said user plane equipment are connected across the network.

24. (currently amended): A mobile communication system according to claim 19, wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second control means~~ the user plane equipment which is to newly accommodate said radio base station.

25. (currently amended): A mobile communication system according to claim 24, wherein said radio base station replacement control apparatus further comprises means for notifying said ~~first control means~~ control plane equipment of identification information of said radio base station as an object of replacement and identification information of said ~~second control means~~ user plane equipment as an accommodation destination.

26. (currently amended): A radio base station replacement control apparatus which controls replacement of a radio base station in a mobile communication system ~~which comprises,~~ the radio base station replacement control apparatus comprising:

a database search unit for searching a database for storing information regarding radio base stations being controlled by a plurality of radio controllers; and

a cell setting change designation unit for concentrically controlling a rearrangement of the radio base stations,

wherein the mobile communication system includes a mobile terminal unit ~~in which a calling process and a Node b utilized for cell setting are controlled by the same protocol architecture,~~ said radio base station which communicates with said mobile terminal unit via a radio channel, and a radio controller which controls said radio base station, and is physically separated into ~~first control means~~ control plane equipment for controlling transfer of signaling and ~~second control means~~ user plane equipment for accommodating said radio base station under the control and controlling transfer of user data, and

wherein said ~~first control plane equipment~~ and ~~second control means~~ said user plane equipment are physically independent of each other.

27. (currently amended): A radio base station replacement control apparatus which controls replacement of a radio base station in a mobile communication system ~~which comprises~~ , the radio base station replacement control apparatus comprising:

a database search unit for searching a database for storing information regarding radio base stations being controlled by a plurality of radio controllers; and

a cell setting change designation unit for concentrically controlling a rearrangement of the radio base stations,

wherein the mobile communication system includes a mobile terminal unit ~~in which a calling process and a Node b utilized for cell setting are controlled by the same protocol~~

~~architecture~~, said radio base station which communicates with said mobile terminal unit via a radio channel, and a radio controller which controls said radio base station, and is physically separated into ~~first control means~~ control plane equipment for performing control independent of a radio transmission scheme and ~~second control means~~ user plane equipment for accommodating said radio base station under the control and performing control depending on a radio transmission scheme, and

wherein said ~~first control plane equipment~~ and ~~second control means~~ said user plane equipment are physically independent of each other.

28. (currently amended): A radio base station replacement control apparatus which controls replacement of a radio base station in a mobile communication system ~~which comprises,~~ the radio base station replacement control apparatus comprising:

a database search unit for searching a database for storing information regarding radio base stations being controlled by a plurality of radio controllers; and

a cell setting change designation unit for concentrically controlling a rearrangement of the radio base stations,

wherein the mobile communication system includes a mobile terminal unit in which a ~~calling process and a Node b utilized for cell setting are controlled by the same protocol~~ ~~architecture~~, said radio base station which communicates with said mobile terminal unit via a radio channel, and a radio controller which controls said radio base station, and is physically separated into ~~first control means~~ control plane equipment for controlling transfer of signaling and ~~second control means~~ user plane equipment for accommodating said radio base station under

the control and controlling transfer of user data, said ~~second control means~~ user plane equipment performing control depending on a radio transmission scheme, and

wherein said ~~first control plane equipment~~ and ~~second control means~~ said user plane equipment are physically independent of each other.

29. (currently amended): A radio base station replacement control apparatus which controls replacement of a radio base station in a mobile communication system, ~~which comprises~~ the radio base station replacement control apparatus comprising:

a database search unit for searching a database for storing information regarding radio
base stations being controlled by a plurality of radio controllers; and

a cell setting change designation unit for concentrically controlling a rearrangement of
the radio base stations,

wherein the mobile communication system includes a mobile terminal unit in which a
calling process and a Node b utilized for cell setting are controlled by the same protocol
architecture, said radio base station which communicates with said mobile terminal unit via a
radio channel, and a radio controller which controls said radio base station, and is physically
separated into ~~first control means~~ control plane equipment for controlling a terminal resource of
said mobile terminal unit and ~~second control means~~ user plane equipment for accommodating
said radio base station under the control and controlling a base station resource of said radio base
station, and

wherein said ~~first control plane equipment~~ and ~~second control means~~ said user plane
equipment are physically independent of each other.

30. (currently amended): A radio base station replacement control apparatus according to claim 26, wherein said ~~first-control plane equipment~~ and ~~second-control means~~ said user plane equipment are connected across a network.

31. (currently amended): A radio base station replacement control apparatus according to claim 26, further comprising means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second-control means~~ the user plane equipment which is to newly accommodate said radio base station.

32. (currently amended): A radio base station replacement control apparatus according to claim 31, further comprising means for notifying said ~~first-control means-control plane equipment~~ of identification information of said radio base station as an object of replacement and identification information of said ~~second-control means~~ user plane equipment as an accommodation destination.

33. (currently amended): A radio base station replacement control method in a communication system ~~which comprises~~ ,

the communication system including:

a mobile terminal unit ~~in which a calling process and a Node b utilized for cell setting are controlled by the same protocol architecture,~~

a radio base station which communicates with the mobile terminal unit via a radio channel,

a radio controller which controls the radio base station, and is physically separated into ~~first control means~~ control plane equipment for controlling transfer of signaling and ~~second control means~~ user plane equipment for accommodating the radio base station under the control and controlling transfer of user data, and

a radio base station replacement control apparatus which is provided physically independently of the first control plane equipment and ~~second control means~~ the user plane equipment and controls replacement of the radio base station with other radio base stations being controlled by the radio controller or by other radio controllers,

~~wherein the~~ radio base station replacement control method comprises comprising:

~~the step of~~ notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second control means~~ the user plane equipment which is to newly accommodate the radio base station.

34. (currently amended): A radio base station replacement control method according to claim 33, the radio base station replacement control method further comprising: the step of

notifying the ~~first control means~~ control plane equipment of identification information of the radio base station as an object of replacement and identification information of the ~~second control means~~ user plane equipment as an accommodation destination.

35. (currently amended): A computer readable medium having recorded thereon a program for causing a computer to execute a radio base station replacement control method in a communication system, the communication system including ~~which comprises~~ a mobile terminal unit in which a calling process and a Node b utilized for cell setting are controlled by

the same protocol architecture, a radio base station which communicates with the mobile terminal unit via a radio channel, a radio controller which controls the radio base station, and is physically separated into ~~first control means~~ control plane equipment for controlling transfer of signaling and ~~second control means~~ user plane equipment for accommodating the radio base station under the control and controlling transfer of user data, and a radio base station replacement control apparatus which is provided physically independently of the ~~first control plane equipment~~ and ~~second control means~~ the user plane equipment and controls replacement of the radio base station,

wherein the program comprises the step of when executed by a computer, performing operations comprising:

notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second control means~~ the user plane equipment which is to newly accommodate the radio base station.

36. (currently amended): ~~A program~~ The computer readable medium according to claim 35, ~~further comprising the step of~~ wherein the operations further comprise:

notifying the ~~first control means~~ control plane equipment of identification information of the radio base station as an object of replacement and identification information of the ~~second control means~~ user plane equipment as an accommodation destination.

37. (currently amended): A mobile communication system according to claim 20, ~~further comprising a~~ wherein the network which connects said ~~first control means~~ control plane

equipment, ~~second control means~~ said user plane equipment, and radio base station replacement control apparatus.

38. (currently amended): A mobile communication system according to claim 21, further comprising a network which connects said ~~first control means~~ control plane equipment, ~~second control means~~ said user plane equipment, and radio base station replacement control apparatus.

39. (currently amended): A mobile communication system according to claim 22, further comprising a network which connects said ~~first control means~~ control plane equipment, ~~second control means~~ said user plane equipment, and radio base station replacement control apparatus.

40. (currently amended): A mobile communication system according to claim 20, wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second control means~~ said user plane equipment which is to newly accommodate said radio base station.

41. (currently amended): A mobile communication system according to claim 21, wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification

information of ~~second-control means~~ said user plane equipment which is to newly accommodate said radio base station.

42. (currently amended): A mobile communication system according to claim 22, wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second-control means~~ said user plane equipment which is to newly accommodate said radio base station.

43. (currently amended): A mobile communication system according to claim 23, wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second-control means~~ said user plane equipment which is to newly accommodate said radio base station.

44. (currently amended): A radio base station replacement control apparatus according to claim 27, wherein said ~~first-control plane equipment~~ and ~~second-control means~~ said user plane equipment are connected across a network.

45. (currently amended): A radio base station replacement control apparatus according to claim 28, wherein said ~~first-control plane equipment~~ and ~~second-control means~~ said user plane equipment are connected across a network.

46. (currently amended): A radio base station replacement control apparatus according to claim 29, wherein said ~~first-control plane equipment~~ and ~~second-control means~~ said user plane equipment are connected across a network.

47. (currently amended): A radio base station replacement control apparatus according to claim 27, further comprising means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second-control means~~ the user plane equipment which is to newly accommodate said radio base station.

48. (currently amended): A radio base station replacement control apparatus according to claim 28, further comprising means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second-control means~~ the user plane equipment which is to newly accommodate said radio base station.

49. (currently amended): A radio base station replacement control apparatus according to claim 29, further comprising means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second-control means~~ the user plane equipment which is to newly accommodate said radio base station.

50. (currently amended): A radio base station replacement control apparatus according to claim 30, further comprising means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of ~~second-control means~~ the user plane equipment which is to newly accommodate said radio base station.

51. (new): A system comprising:

means for communicating between a radio base station and a mobile terminal unit via a radio channel;

means for controlling the radio base station and physically separated into first control means for controlling transfer of signaling and second control means for controlling transfer of user data; and

means for controlling replacement of the radio base station by another radio base station, wherein the mobile terminal is handed over from the radio base station to the other radio base station by a means for drift radio controlling, without establishing a path between the means for controlling the radio base station and the means for drift radio controlling.

52. (new): A mobile communication system, comprising:

a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel, the radio controller being physically separated into control plane equipment for controlling transfer of signaling and user plane equipment for controlling transfer of user data,

wherein the mobile terminal is handed over from one radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller.

53. (new): A mobile communication system, comprising:

a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel, the radio controller being physically separated into control

plane equipment for performing control independent of a radio transmission scheme and user plane equipment for performing control depending on a radio transmission scheme,

wherein the control plane equipment and the user plane equipment are adapted to be connected across a network.

54. (new): A mobile communication systems comprising:

a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel, the radio controller being physically separated into control plane equipment for controlling transfer of signaling and user plane equipment for controlling transfer of user data, said user plane equipment performing control depending on a radio transmission scheme; and

a radio base station replacement control apparatus provided physically independently of the control plane equipment and the user plane equipment, the radio base station replacement control apparatus controlling replacement of said radio base station with other radio base stations being controlled by the radio controller or by other radio controllers.

55. (new): A mobile communication system, comprising:

a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel, the radio controller being physically separated into control plane equipment for controlling a terminal resource of said mobile terminal unit and user plane equipment for accommodating said radio base station and controlling a base station resource of said radio base station,

wherein the user plane equipment is incorporated into the radio base station,

wherein replacement of said radio base station in communication with the mobile terminal with another radio base station is controlled by a user data selector and synthesizer unit incorporated into the radio base station.